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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,826	10/07/2005	Satoshi Yasui	Q90673	9465

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EXAMINER	
STEELE, JENNIFER A	

ART UNIT	PAPER NUMBER
1794	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/552,826	YASUI ET AL.	
	Examiner	Art Unit	
	JENNIFER STEELE	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 May 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-7,9-16 and 18-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-7,9-16 and 18-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/12/2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/12/2009 has been entered.

Claim Objections

1. Claim 3 objected to because of the following informalities: Claim 3 is written to be dependent on claim 3. Appropriate correction is required.

Specification

2. The amendment to the specification submitted to describe the features in the new Fig. 15 A, 15B, 16A and 16B has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim1, 3-7, 9-16, 18-24 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter

which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant is describing the woven or knitted fabric by the formula A/B < 0.9 which requires that yarn (2) is longer in length than yarn (1). However, the claim states that this formula is satisfied when "the length of the respective yarn being measured under a load of 1.76 mN/dtex when the yarn is non-elastic yarn having an elongation at break of 200% or less or under a load of 0.0088 mN/dtex when the yarn is an elastic yarn having an elongation at break higher than 200%" It is not clear if the formula A/B < 0.9 is a structural limitation or the length is dependent on the test measurements wherein the yarn is measured under a load. The specification (page 29, lines 1-10) describes the yarns (1) and (2) are paralleled yarns subjected to an air filament combining procedure, a twisting procedure or a covering procedure to provide composite yarns. The resultant composite yarn there is a difference in yarn length and yarn (2) is longer than yarn (1). The specification also describes the yarns length differences are achieved by the following process:

> [0057] In another embodiment of the woven or knitted fabric of the present invention containing two different types of yarns, the fabric has a woven fabric structure, for example a plain weave structure wherein warp and weft yarns are respectively constituted by paralleled yarns constituted from the yarn (1)1 having a high water-absorbing and self-elongating property and the yarn (2)2 having a low water-absorbing and self-elongating property. If such paralleled yarns are used as warp and weft to form a woven fabric, the yarn (1)1 having a high water-absorbing and self-elongating property is paralleled in a dry state while being mechanically stretched under, a tension in a dry state, with the yarn (2)2 and the resultant paralleled yarn is subjected to the weaving procedure. After completing the weaving procedure, the tension is released and thus the yarn (1)1 mechanically shrinks, while the yarn (2)2 substantially does not shrink. Since the ratio A/B of the mean length A of the yarn (1)1 to the mean length of the yarn (2)2 is controlled to be 0.9 or less in the resultant woven structure, the longer yarn (2)2 is crimped around the shorter yarn (1)1 as shown in FIG. 2A, whereby an apparent thickness of the paralleled yarn increases. As a result, the opening area of the resultant woven fabric is relatively low in a dry state. When the woven fabric absorbs water to a wetted state, the yarn (1)1 absorbs water and elongates itself as shown in FIG. 2B, while the yarn (2)2 is in a tensed state while being accompanied therewith, and whereby the opening area of the wetted fabric becomes higher than the opening area of the

> dry fabric to facilitate the air-permeability. Methods for weaving and knitting the fabrics shown in FIGS. 1 and 2 by using the paralleled yarns constituted from the yarns (1) and (2) will be further described hereinafter.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1, 3-7, 9-16, 18-24 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 describes in section (3) of the claim that yarns (1) and (2) being arranged in the same direction as each other in the test piece and *picked up from the test piece*. It is unclear what the phrase *picked up from the test piece* is referring to.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claim 1, 3-7, 9-12, 16 and 18-24 rejected under 35 U.S.C. 103(a) as being unpatentable over Tebbe (US 6,767,850) in view of Doi et al (US 6,403,216) and DuFour (US 4,500,679).

Claim 1 describes a woven or knitted fabric containing yarns (1) having a high water absorbing and self elongating property and yarns (2) having a low water absorbing and self elongating property,

Wherein,

(1) when the high water absorbing and self elongating yarns (1) and the low water absorbing and self elongating yarns (2) are respectively subjected to a measurements of self elongating on absorbing water in such a manner that each of the yarns is wound 10 times around a reel of hank having a circumference of 1.25m long under a load of 0.88 mN/dtex to form a hank; the hand is removed from the reel and left to stand in the air atmosphere having a temperature at 20C and a relative humidity at 65% for 24 hours to dry the hank; then the length of the dry hand is measured under a load of 1.76 mN/dtex when the yarn is a nonelastic yarn having an elongation at break of 200% or less, or under a load of 0.0088 mN/dtex when the yarn is an elastic yarn having an elongation at break higher than 200%; the hank is immersed in water at a temperature at 20C for 5 minutes; then the hank is taken out from water a length of the wet hank is measured under the same load as described above in response to the

elongation at break of the hank; and the self elongation of each yarn is calculated in accordance with the following equation:

Self elongation of yarn % [(Lw-Ld)/Ld] x 100

One (1) of the two type of yarns is a high water absorbing, self elongating yarn having a mean self elongation of +5% or more and the other (2) is a low water absorbing self elongating yarn having a mean self elongation lower than +5%;

(2) the high water absorbing self elongating yarns (1) are constituted from polyetherester fibers formed from polyetherester elastomer comprising hard segments comprising polybutylene terephthalate blocks and soft segments comprising polyoxyethylene glycol blocks having a number average molecular weight of 1,000 to 6,000; and the ratio by mass of the hard segments to the soft segments in the polyetherester elastomer is in the range of from 30/70 to 70/30; and

(3) when a test piece is prepared from the fabric in such a manner that the fabric is stabilized in dimension in the atmosphere having a temperature at 20C and a relative humidity at 65% and then cut into pieces of 30 cm long in the warp or wale direction and 30 cm long in the weft or course direction; and the high water absorbing and self elongating yarns (1) and the low water absorbing and self elongating yarns (2) and respectively contained in the test pieces satisfy the following requirement:

$A/B < 0.9$

Wherein A represents a mean length of the high water absorbent and self elongative yarns (1) and B represents a mean length of the low water absorbing and self elongating yarns (2), the yarns (1) and (2) being arranged in the same direction as

each other in the test pieces and picked up from the test piece; the length of the respective yarn being measured under a load of 1.76 mN/dtex when the yarn is a nonelastic yarn having an elongation at break of 200% or less or under a load of 0.0088 mN/dtex when the yarn is an elastic yarn having an elongation at break higher than 200% and

whereby the air permeability of said fabric increases when wetted with water.

Examiner has underlined portions of the claim that are drawn to the structure of the article. The portions that are not underlined represent the article properties.

Tebbe teaches a two dimensional textile material for the purpose of controlling permeability where in there are control elements that deform on exposure to an environmental parameter, such as air humidity (ABST). Tebbe teaches materials with differing swelling behavior, i.e. differing volume expansion in dependence on the air humidity (col. 2, lines 20-28). Tebbe teaches an embodiment in Fig. 18 shown below where a control weft thread becomes elongated in the presence of air humidity and the control weft thread forms loops around the warp threads. The warp thread is not responsive to the humidity change. As a result, the permeability of the fabric increases around the gaps in the vicinity of the loops.

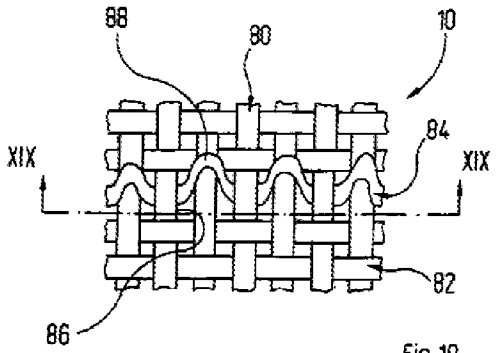


Fig. 18

Tebbe teaches a self elongating yarn and a yarn that does not self elongate in response to moisture. Tebbe teaches a woven structure where the self elongated yarn changes in response to moisture and increases the permeability of the fabric.

Tebbe differs from the current application and does not teach the yarns lengths are measured under a load of 1.76 mN/dtex. Tebbe differs and does not teaches the properties of elongation at break and Tebbe does not teach the yarn is polyetherester fiber produced from polybutylene terephthalate and polyoxyethylene glycol blocks and Tebbe does not teach the number average molecular weight of the polyoxyethylene glycol for the soft segments and does not teach the mass ratio of hard segments to soft segments.

Doi teaches a woven fabric, a weft knit and a warp knit structure can be produced of these yarns. Doi teaches structures where the moisture absorbing fiber may be mixed with other materials and fibers such that the other fibers have different shrinkage or higher strength (col. 15. line 1). Doi teaches knit structures wherein the

moisture absorbing fiber is used as the back thread of a half tricot knit or laid in via a back thread guide of a power net or satin structure (col. 15, lines 25-31). Doi teaches the synthetic fiber can be used in a form of bare yarn knit to form knitting loops together with another fiber yarn or may be converted to a composite yarn (col. 15, lines 40-42). Doi teaches the synthetic fiber can be used in the warp and weft yarns or just as the weft yarns (col. 15, lines 50-53).

Doi teaches a synthetic fiber with moisture-absorbing/releasing property and exhibits high elongation and high stretch recovery characterized in that it has moisture absorption ratios of 0.5 to 4% by weight. Doi teaches the synthetic fiber maintains a high strength at break of an elastic fiber component also in the state of having absorbed moisture, and can be used for manufacturing a stretch fiber fabric product that is comfortable by blending with another fiber material (ABST).

Doi teaches the synthetic fiber has an elongation at break of 300% or more and an elastic recovery of 70% (col. 4, lines 10-12). The moisture absorbing/releasing property of the high elongation and high stretch-recovery synthetic fiber is adjustable by blending a desired amount of a compound having an amount water absorption ratio. Doi teaches a high stretch/high elongation fiber can have a desired amount of moisture absorption (col. 4, lines 29-47). Doi teaches polyurethane type and polyether-ester type synthetic fibers obtained by ordinary melt-spinning and there is no limitation in the water absorption resins to be blended or water adsorption components to be graft-polymerized.

Doi teaches the synthetic fiber according to the present invention may be mixed with other materials in accordance with the use thereof, in which there is not limitation in kind, form and size thereof. For example, the material includes natural fiber, or synthetic fibers such as polyester or nylon and further elastic fiber having no moisture absorbability. A spun yarn mixed spun with natural fiber, an enabled mixed yarn mixed with fiber having different shrinkage or high strength. A twisted union yarn, a composite false twisted yarn or a double feed type air jet textured yarn may be used (col. 14, lines 58-67, col. 15, lines 1-10).

Doi teaches a polyether-ester type synthetic fiber is one having hard segment including for example aromatic polyester such a polytetramethylene terephthalate, polytrimethlene terephthalate or polyethylene terphthalate and soft segment including aliphatic polyether glycol such as polytetramethylene glycol or polypropylene glycol (col. 13, lines 39-47). Doi differs from the current application and does not teach a polyetherester fiber produced from polybutylene terephthalate and polyoxyethylene glycol blocks. Doi differs and does not teach the number average molecular weight of the polyoxyethylene glycol for the soft segments and does not teach the mass ratio of hard segments to soft segments.

DuFour teaches a thermoplastic copolyetherester elastomer that is a segmented polymer comprising about 30% to 80% by weight of soft segments and 70% to 20% by weight of hard segments. DuFour teaches the polyetherester is a fiber-forming polyester. DuFour teaches the soft segments are polyether glycols having a number

average from about 350 to 6000 (col. 2, lines 6-25). DuFour teaches hard segments of polybutylene terephthalate (col. 4, lines 47 and 61).

Tebbe teaches woven or knit structures where the permeability is increased as a result of one of the yarns or fibers absorbing moisture and swelling or elongating to open the weave or knit structure. Tebbe does not teach a copolyetherester elastomic fiber as claimed. Doi and DuFour teach copolyetherester fibers. Doi teaches the fibers are employed to produce a knit or woven structure with another nonabsorbing fiber. DuFour teaches that the specific copolyetherester elastomeric fiber with the claimed molecular weight is known in the art. The combined references do not teach the claimed test methods and properties that measure the fiber lengths under tension and the self-elongation property. It would have been obvious to employ the techniques of combining moisture absorbing and moisture nonabsorbing yarns of Tebbe with the moisture absorbing fibers of Doi and DuFour and the results of producing a fabric with increased permeability would have been predictable. It further would have been obvious to optimize the selection of yarns and woven or knit structure to meet the claimed yarn length ratio as measured by the test measurement of claim 1 to arrive at the desired increase in permeability.

As to claim 3, 10, 11, 12 and 18 as noted in the above paragraph, the combined references do not teach the percentage of elongation of the water absorbing yarn and the percentage in change in the opening between the yarns and do not teach percentage of change in permeability and change in roughness. Tebbe teaches the yarns elongation to open the weave of the fabric and increase the permeability. Tebbe

shows how the yarn expands and would therefore produce a rough surface. It would have been obvious to optimize the yarn selection to meet the desired elongation change as well as the change in openings between the yarns and the resultant change in permeability. As the features of water absorbing fibers that swell or elongate when moisture is absorbed, it would have been obvious to test the change in length under a specific tension and optimize the fabric structure to achieve the desired permeability.

As to claims 4 and 5, Tebbe differs from the current application and does not teach the yarns are combined in parallel. Doi teaching knit and woven structures wherein a composite or mixed yarn are combined in parallel to form yarn loops and wherein in the combined yarns form at least one of warps and wefts as stated above in paragraph 3.

As to claim 6, Tebbe teaches the yarns are arranged to alternate the moisture absorbing yarn and the nonabsorbing yarn as shown in Fig. 18 of Tebbe above. Yarn **84** is the moisture absorbing yarn and yarn **82** is the moisture nonabsorbing yarn.

As to claim 7, Tebbe does not teach a composite yarn comprised of the moisture absorbing yarn. Doi teaches a composite yarn of the moisture absorbing synthetic fiber and one of other fibers that include synthetic or natural fibers that do not have the moisture absorbing and elongating properties of the synthetic fiber of the invention.

As to claim 9, Tebbe is silent with respect the composition of the nonabsorbing yarns. Doi teaches using another yarn in addition to the invented moisture absorbing, elongated yarn, can be of polyester (col. 9, lines 44).

As to Claim 16, Tebbe differs from the current application and does not teach the yarn density. Doi teaches embodiments with a knitted structure of yarn density satisfying the formula in claim 16. Doi teaches in example 13 a knit fabric of yarn density 75 course/in and 48 wale/in which is equal to 3600.

As to claim 19, Tebbe differs from the current application and shows the absorbing yarn as the weft yarn and does not show the yarn in the warp direction. Doi teaches woven structures where the synthetic fiber can be used in the warp and weft yarns or just as the weft yarns (col. 15, lines 50-53).

As to claim 20, Doi teaches a covered yarn wherein the absorbing synthetic fiber is covered by another yarn and Doi teaches mixing yarns and fibers to obtain a blended yarn.

As to claim 21, Tebbe teaches a woven fabric comprising two different types of yarns that are capable of increasing the air permeability upon absorbing water.

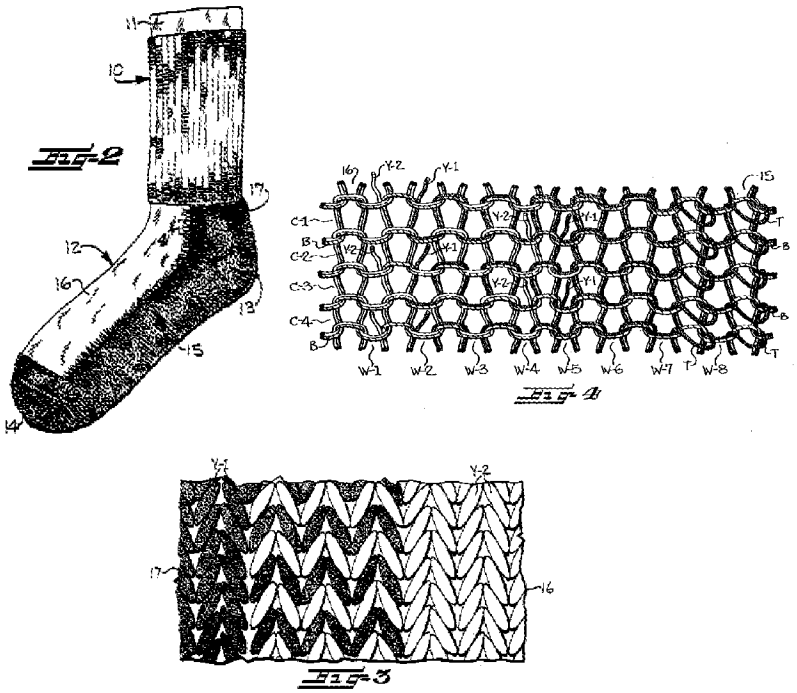
As to claims 22-24, these claims are drawn to statements of use and do not distinguish the claimed invention from prior art. However, Tebbe teaches fabric for use in garments, sportswear and underwear.

6. **Claim 5, 6 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Tebbe (US 6,767,850) in view of Doi et al (US 6,403,216) and DuFour (US 4,500,679) and in further view of Chesebro, Jr. (US 5,095,548).** Tebbe, Doi and DuFour differ from the current application and does not teach alternating the composite yarn with the other yarn. Chesebro teaches a moisture control sock where moisture

control characteristics are imparted to the sock by a hydrophobic yarn knit in plated relationship with the body yarn in partial courses extending throughout the sole and a hydrophilic yarn knit in plated relationship with the body yarn in partial courses extending throughout the instep (ABST). As to claim 5 and 6, the structure of Chesebro can be used in a woven fabric in that the parallel yarn relationship throughout the fabric and Chesbro changes the pattern of the yarns throughout the sock to provide different characteristics at different places in the sock in order to absorb moisture or allow moisture to evaporate (Fig. 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a knit structure of Chesebro incorporating two yarns of different moisture absorbing properties knit in parallel motivated to produce a fabric with moisture absorbing properties.

As to Claim 13, Doi differs from the current application and does not teach a fabric with areas of high moisture absorbing yarns and area of low moisture absorbing yarns. Chesebro teaches a sock with a knit pattern so as to have areas where the sock in hydrophobic and areas where the sock in hydrophilic as illustrated in Fig. 2-4.



In comparison to Applicant's Fig. 11 and 1(A) and (B) and 15(A) and 15(B) shown below.

Fig.11

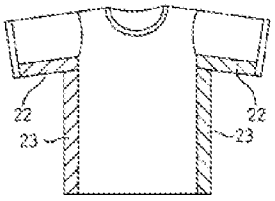


Fig.1

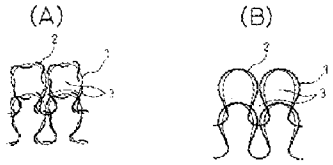


Fig. 15(A)

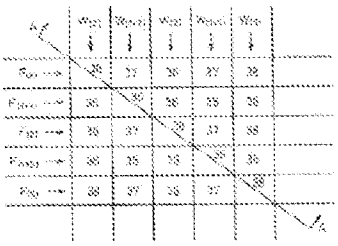
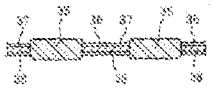


Fig. 15(B)



It would have been obvious to one of ordinary skill in the art to have employed a knit pattern in the fabric of Doi motivated to produce a fabric with varying moisture absorption properties throughout the fabric.

7. **Claim 14 and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Tebbe (US 6,767,850) in view of Doi et al (US 6,403,216) and DuFour (US 4,500,679) and in further view of Safrit et al. (US 4,341,096).** Tebbe, Doi and DuFour differ from the current application and does not teach a three layer fabric. Safrit teaches a three layer knitted fabric that provides cushioning and moisture absorbing

characteristics. Safrit teaches inside and outside fabric layers of hydrophobic yarn and the intermediate layer of hydrophilic yarn. While Safrit teaches a moisture absorbing layer as the intermediate layer and moisture disabsorbing layers on the outside and the current application teaches the outside layers are the moisture absorbing layers, it would have been obvious to one of ordinary skill in the art at the time the invention was made to produce a moisture absorbing fabric with three layers motivated to produce a fabric that removes perspiration from the body and allows the moisture to evaporate into the air.

Response to Arguments

8. Applicant amended the claims and claim 1 and dependent claims are now being rejected under 35 USC 112 1st as the formula describing the difference in fiber lengths is not based on the test under load but is described in the specification as a result of the method of producing the fabric where the two parallel yarns are woven with one under draft. Examiner has also presented claim 1 and underlined the structural features that are present in the claim versus the claimed properties. The structure and composition of the fabric is what is being compared to the prior art. As Applicant employs test methods for describing the current invention that are not disclosed in the prior art, one of ordinary skill in the are could optimize the combination of features taught in the prior art and tested the fabric as disclosed by Applicant and it would have been obvious to do so. However, if the structural features of the claimed invention are different from the prior art and/or Applicants show evidence that the combination of features produces an

unexpected result that would not have been achieved by simply combining the references, the rejection can be overcome.

9. The objection to the drawings has been withdrawn in view of Applicant's amendment to the specification to describe the drawings. The drawings were requested to show the feature of claim 13 of the islands in the sea woven structure. This structure is described in the specification on page 33 or [0021 of the PGPub.

10. Applicant's arguments with respect to claim 1, 3-7, 9-16 and 18-24 have been considered but are moot in view of the new ground(s) of rejection. Applicant argues that Doi does not teach features (B) and (C) which are described by Applicant as the elongation of the fiber of +5% when absorbing water and molecular weight and ratio of hard and soft segments of the polyetherester fiber. As DuFour is referenced for teaching the fiber structure and composition, the property of elongation when water is absorbed would be inherent in the fiber of DuFour and when the fiber of DuFour is employed in the structure of Doi and new reference to Tebbe, this property of elongation would be present.

Applicant argues that DuFour does not teach the hard segments formed of polybutylene terephthalate and soft segments of polyoxylene glycol. DuFour teaches hard segments of polybutylene terephthalate that can be 70% to 20%. DuFour teaches soft segments of polyether glycol and dicarboylic acid and they can make up 30% to 80% of the elastomer (col. 2, lines 6-22). Therefore DuFour teaches the elastomer is known in the art. While DuFour does not teach that the polybutylene terephthalate copolyetherester absorbs moisture, Doi is teaching that the copolyetheresters absorb

moisture due to the polyether glycol soft block and therefore it would have been obvious to select from the known polymers compositions.

11. Applicant's argue that the combination of Doi and DuFour do not teach the woven or knitted fabric with the claimed features and the specific advantages. New grounds of rejection is presented in this office action to Tebbe as Tebbe teaches the combination of a water absorbing fiber in a woven or knit fabric that produces the effect of increasing the fabric air permeability when the fiber absorbs water.

12. Applicant argues the reference to Chesebro fails to teach the polyetherester fiber having a water absorbing property and Chesebro does not teach the specific advantages of the claimed invention. Chesebro is referenced for teaching the features of claims 5, 6 and 13 wherein moisture absorbing yarns are formed into a knitted or woven structure by the technique of plaiting the yarns together which is equated with Applicant's claimed parallel yarn structure. Applicant describes a process of producing the fabric as noted in paragraph [0057] cited above, where the moisture absorbing yarn is paralleled with the nonabsorbing yarn when the moisture absorbing yarn is in a stretched or tensioned state. Chesebro does not teach this process where the resultant plaited yarns would have different lengths. As the claim is written, the plaiting process of Chesebro is equated with the parallel yarns described in the claims.

13. The reference to Dawson is not cited in favor of the reference to Tebbe.

14. Applicant argues the reference to Safrit does not teach the features of a water absorbing self elongating property, a polyetherester fiber in a woven or knitted fabric with the feature of yarns have different lengths under a load of 1.76 mN/dtex. Examiner

has relied upon the feature of three layer structure of Safrit and that it is known in the art to employ knitted structures with three layers. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER STEELE whose telephone number is (571)272-7115. The examiner can normally be reached on Office Hours Mon-Fri 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/J. S./
Examiner, Art Unit 1794

/Elizabeth M. Cole/
Primary Examiner, Art Unit 1794

7/11/2009